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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
WILLIAMS, ROSS A	

ART UNIT	PAPER NUMBER
3714	

NOTIFICATION DATE	DELIVERY MODE
05/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/616,905	KUESTERS, ECKHARD H.	
	Examiner	Art Unit	
	Ross A. Williams	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-16 and 18-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-16 and 18-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claims 1, 2, 3, 12 and 13 have been amended

Claims 9 and 17 have been cancelled.

Claims 21 and 22 have been newly added.

Claims 1 – 8, 10 – 16 and 18 – 22 are currently pending.1

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 – 8 and 12 – 16, 21,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honey et al. (US 5,564,698) in view of Honey (US 5,912,700) in view of Bledsoe (US 5,742,237).

Claims 1, 12, 13, 21 and 22: Honey'698 discloses an electromagnetic transmitting hockey puck that comprises an electromagnetic transmitter that could include an infrared transmitter, ultraviolet transmitter, radar repeater, RF transmitter or other device for transmitting electromagnetic waves outside of the visible spectrum. The electromagnetic transmitter is turned on using a shock sensor and is turned off using a timer (Honey et al Abstract). Honey discloses a power source (Honey '698 5:5 – 12), a transmitter coupled to the power source that is configured to emit an electromagnetic signal (Honey '698 Abstract), a shock actuated switching device (Honey '698 6:4 – 10), a timing device that controls the transmission of an electromagnetic signal for a predetermined time period after actuation of the switching device (Honey '698 6:40 – 46). However Honey '698 does not disclose a golf ball comprising the above electromagnetic transmission system, nor does Honey'698 discloses a golf ball that delays turning on a transmitter for a period of time such as a few seconds in response to actuation of a switch. However Honey '700 discloses a system that uses a similar system for determining the location of a hockey puck. Honey '700 further discloses that the transmitter that is used in a hockey puck can also be used in many other types of balls used in sports such as golf balls (Honey '700 32:26 – 36). Further, it is well known in the art that golf balls have dimpled surfaces. Honey '700 teaches a radar repeater that is similar to the radar repeater as disclosed in Honey '698 and is positioned in a hockey puck. Honey '700 discloses that the golf ball can comprise any good radar repeater (Honey '700 32:28 – 32). Bledsoe discloses a method monitoring tags for the purpose of tracking the position of tags that emit an electromagnetic signal. Bledsoe discloses that the tags communicate with monitoring devices by means of

electromagnetic energy (Bledsoe 4:59 – 62). Bledsoe also discloses that the monitors are configured to detect periodic transmissions that are issued automatically by the tags (Bledsoe 5:2 – 9). The tags are configures to automatically transmit on a periodic or random basis a relatively short duration of radio signal that is modulated with a signal containing a unique identifier for each tag (Bledsoe 5:19 – 25) Bledsoe discloses that it is a goal of the system in particular with the tags to conserve battery power. The tags only need to stay active or transmit every five minutes or so thus remaining in the off state longer than in the on state (Bledsoe 5:39 – 61). Bledsoe does not specifically state when the tags are activated to transmit a signal, however it is inherent to the tags of Bledsoe that they would need to be activated at some point in order to enable the transmitting of a electromagnetic signal. Obviously the manufacturer would not manufacture a transmitting tag that possesses finite power source such as a battery and have the tag immediately enable the transmitting of an electromagnetic signal before it is used in its desired application such as being sold to a consumer. This would not be in line with Bledsoe's' purpose of conserving battery power (Bledsoe 20:28 – 45).

It would be obvious to one of ordinary skill in the art to modify Honey '698 in view of Honey '700 to provide a transmitter that is positioned in a golf ball that is well known to have a dimpled surface. This would be obvious in view of the fact that Honey '698 is directed to the tracking and locating of piece of sports equipment that is moved around a playing field such as hockey puck. Honey '700 teaches that it is also beneficial to track the movements of other objects used in different sports such as the game of golf. This would be beneficial because golf balls like hockey pucks, upon being hit can travel at a very high velocity and are relatively small thus making them difficult to track by the

naked eye after being hit. It would be further obvious to modify Honey'698 in view of Bledsoe to provide a mechanism to turn on a transmitter after a delay of time such as a few seconds to a couple of minutes to conserve a finite power source such as a battery after the device has been activated by a switch of some sort.

Claim 3: Honey '698 discloses that the timing and control circuit 154 is used to detect the edge from the shock sensor and automatically turn on and off the diodes after a predetermined time (Honey '698 6:40 – 48).

Claim 4: Honey '698 discloses the use of a transmitter that comprises a light emitting diode (Honey '698 6:18 – 21).

Claim 5: Honey discloses a transmitter that comprises an antenna to transmit an electromagnetic signal (Honey '698 Fig 10).

Claims 6, 7, 8 and 14 – 16: Honey '698 discloses a modulator that is used in connection with an RF transmitter or a radar repeater that is embedded a hockey puck (Honey '698 3:16 – 25). Honey '698 discloses that various types of modulating can be used depending on the type of transmitter that is used. One such technique is BPSK modulation (Honey '698 10:1 – 64). Honey discloses that when used with a radar repeater the system can differentiate between different pucks that are used by other players wherein the transmitted signal from the pucks are modulated at different rates thus making the transmission unique and the puck easily identifiable from other pucks. Thus, if there are multiple players in a given hockey rink, wherein each player is assigned a puck, each puck having a unique signature, (such as in a practice session) each player is by extension identified by the unique transmission that identifies the puck they are playing or practicing with.

Claims 10, 11 and 18 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honey et al. (US 5,564,698) in view of Honey (US 5,912,700) as applied above and in view of Maleyko (US 5,228,686).

Claims 10, 11 and 18 – 20: Honey '698 discloses a hockey puck that possesses LED's that are cut flush with the surface of the puck, thus the LED's are still able to communicate a signal (i.e. infrared) to the receiving station. The combination of Honey '698 and Honey '700 fails to teach the use of a transparent layer on a golf ball or puck. However Maleyko teaches the use of a ball that possesses light emitting diodes that are used embedded within a transparent layer. Thus the signal (i.e. light) from the LED's can still be transmitted from the ball and still be contained and protected from shock or other external disturbances (Maleyko abstract Fig 2 and 3). Although Maleyko discloses the use of light, one of ordinary skill in the art would be motivated to modify Honey '698 and Honey '700 to provide a ball with a transparent coating that enables the transmission of a signal from an LED, whether that signal is visible light or light of a different wavelength that is not visible to the naked eye, because this would provide a layer of protection to the inner components of the ball or puck while still allowing the transmission of light signals.

Response to Arguments

Applicant's arguments with respect to claim 1-8,10-16 and 18-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross A. Williams whose telephone number is (571) 272-5911. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAW
5/10/07

Robert E. Pezzuto
Supervisory Patent Examiner
Art Unit 3714